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REMARKS

Claims 1-18, 28-46 and 52 were rejected under 35 U.S.C. 112 due to objections to claims 1, 28 and 52. It is believed that those objections have been overcome by the above amendments.

Applicant notes with appreciation the allowance of claims 19-27 and 47-51 and the finding that claims 28-29 and 4-8 and 43-46 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112 and to incorporate any limitations of any base claims and intervening claims. Claims 4-8 and 43-46 have not been amended to incorporate the limitations of base and intervening claims because it is believed that those base and intervening claims are now allowable.

Claims 1-3, 9-18, 40-42 and 52 were rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's prior patent application WO99/11033. That rejection is respectfully traversed and reconsideration is requested.

As discussed in the present application, pages 5 and 6, the cited reference relies on destination based virtual networks. In a destination based virtual network, each node has buffers assigned to virtual channels where each virtual channel is associated with a destination within the network. Each destination based virtual network can be compared to an egress based virtual network as illustrated in Fig. 8A of the present application. However, in the prior art reference, where the source of a packet precedes the nodes 52, the destination based virtual network would continue to expand going toward the source. By contrast, with the present invention, the egress based virtual network is limited in the extent to which it fans out, beginning at nodes 52 even if the source precedes a node 52. Leading into the nodes 52, a packet follows a source based virtual network as illustrated in Fig. 8B. Viewed from the source 50, the source based virtual network (Fig. 8B) fans out to the nodes 52, from which an egress based virtual network (Fig. 8A) fans into the destination. A packet traverses the source based virtual network, transitions to an egress based virtual network and then traverses the egress based virtual network to the packet destination.

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In the cited prior art reference, a packet would travel along a single destination based virtual network that fans in to the destination.

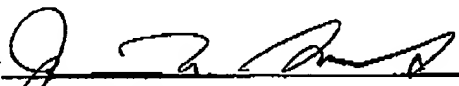
The examiner has referred to Figure 4 of Applicant's prior application and has suggested that the interconnected routers in the first half of the torus array correspond to source based virtual networks and routers in the second half of the array correspond to egress based virtual networks. Such is not the case. Virtual networks are defined not only by the physical routers and links, but also by the assignment of virtual channel buffers within each node. The prior application included only destination based assignment of virtual channel buffers and thus included only destination based virtual networks, not source based virtual networks. Destination based virtual networks can be compared to egress based virtual networks, except that the destination based virtual networks of the reference extended all the way back to the source. By contrast, the claimed invention additionally includes source based virtual networks such that the extent to which the egress based virtual networks fan out can be limited.

As the reference does not show each claimed feature, specifically source based virtual networks (claims 1 and 40) or source based tunnels (claim 52), the rejection under 35 U.S.C. 102 should be withdrawn.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,
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